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EXAMINER

DESIR, PIERRE LOUIS

ART UNIT PAPER NUMBER

2681

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/078,377

Applicant(s)

HANSON ET AL.

Examiner

Pierre-Louis Desir

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-105 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-105 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/12/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 69 is objected to because of the following informalities: "application identity a network device" should be "application identity, a network device." Appropriate correction is required.

Claims 102-103 are objected to because of the following informalities: "decisionmaking" should be "decision making." Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Although applicant discloses that at least one mobile computing device dynamically determines selectable levels of service, the limitation “determines selectable levels of service based at least in part on the mobile computing device’s ability to communicate via said network or subnetwork,” is a new matter that is not described in the specification.

Claims 80-85 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification contains no description of managing or controlling access to or consumption of computing resource while the mobile computing device is unable to send IP datagrams over any network or subnetwork.

Note: applicant is respectfully invited to show to the examiner where this limitation is described in the specification in such a way to reasonably convey to one skilled in the art that the inventor, at the time the application was filed, had possession of the claimed invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "mobile device" in line 4 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Note: for the process of examination, "mobile device" will be interpreted as "mobile computing device."

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 29-30, 33-35, 37-43, 46, 48-49, 56, 58, 69, 72-73, 77-81, 82-83, 86-90, 92-93, 96, 99, 102-105 are rejected under 35 U.S.C. 102(e) as being anticipated by Ahmed et al. (Ahmed), U.S. Patent No. 6256300.

Regarding claim 29, Ahmed discloses a network-computing environment (see fig. 1) comprising a plurality of networks or subnetworks (see fig. 1, col. 6, lines 61-65); at least one software component that consumes at least one computing resource via at least one of a plurality of networks or subnetworks (i.e., network nodes provide network access to mobile stations, and in case of connection-oriented applications, the connections are identified in the access segments where there are resources dedicated on a per connection basis. Thus, at each connection, an application (i.e., software component) consumes dedicated resources) (see fig. 3A, col. 7, line 59 through col. 8, line 5); at least one mobile computing device coupled to at least one of said

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plurality of networks or subnetworks (see fig. 1); and a policy management system operating on at least another computing device that is coupled to at least one of said networks or subnetworks (i.e., mobility management module) (see fig. 3B), the mobile computing device cooperating with the policy management system to dynamically manage access by the computing device of the resource, the resource at least in part available through the networks or subnetworks as the device roams between the networks or subnetworks, even if communications to the resource is secure (i.e., during a connection/call (secure connection), temporary addresses (resources) are used to route optimization as mobiles move or roam) (see fig. 3B, col. 11, lines 42-46).

Regarding claims 30 and 83, Ahmed discloses a network computing environment and a method (see claims 29 and 82 rejections) wherein the mobile computing device accesses the network or subnetwork wirelessly (see fig. 1, col. 7, lines 6-8).

Regarding claims 33-35, and 86-87, Ahmed discloses a network computing environment and a method (see claims 29 and 82 rejections) wherein the mobile computing device and the policy management system cooperate to manage at least one of access to and consumption of the resource on a per user basis, per device basis or both (i.e., per connection basis) (see fig. 3A, col. 7, line 59 through col. 8, line 5).

Regarding claim 37-38, and 88-89, Ahmed discloses a network computing environment and a method (see claims 29 and 82 rejections) wherein the another computing device and the mobile computing device cooperate to provide policy decision-making based on at least a cost metric (see col. 14, lines 16-21), wherein the environment is multi-home/multi-path (see figs. 8A-8B), and the cost metric comprises least cost routing (i.e., minimal delay and minimal cost) (see col. 14, lines 17-18).

Regarding claims 39 and 90, Ahmed discloses a network computing environment and a method (see claims 29 and 82 rejections) wherein the policy management system and the mobile computing device cooperate to enforce policy management rules based at least in part on locale of the mobile computing device (see col. 2, lines 55-57, and col. 13, lines 31-33).

Regarding claim 40, Ahmed discloses a network computing environment (see claim 39 rejection wherein the locale comprises proximity to a network point of attachment (see col. 2, lines 55-57, and col. 13, lines 31-33).

Regarding claim 41, Ahmed discloses a network-computing environment (see claim 39 rejection) wherein the locale comprises proximity to an access point/base station (see col. 6, lines 56-61, and col. 13, lines 31-33).

Regarding claim 42, Ahmed discloses a network-computing environment (see claim 39 rejection) wherein the locale comprises proximity to a network hub (see col. 6, lines 56-61, and col. 13, lines 31-33).

Regarding claim 43, Ahmed discloses a network-computing environment (see claim 39 rejection) wherein the locale comprises proximity to a router (see col. 6, lines 56-61, and col. 13, lines 31-33).

Regarding claims 46 and 92, Ahmed discloses a network-computing environment and a method (see claims 29 and 82 rejections) wherein at least one of said another computing device and said mobile computing device is limited by the policy manager system such that said application operating on the mobile computing device is allowed access to or consume services of less than all of said plurality of networks or subnetworks (i.e., network nodes provide network access to mobile stations (i.e., access to one network), and in case of connection-oriented

applications, the connections are identified in the access segments where there are resources dedicated on a per connection basis) (see fig. 3A, col. 7, line 59 through col. 8, line 5).

Regarding claims 48 and 93, Ahmed discloses a network-computing environment and a method (see claims 29 and 82 rejections) wherein the policy management system and the mobile computing device cooperate to govern the rate at which an application's operations/transactions are completed (see col. 14, lines 15-36; also refer to col. 5, lines 33-37).

Regarding claim 49, Ahmed discloses a network-computing environment (see claim 48 rejection) wherein the policy management system learns the governing dynamically (see col. 14, lines 15-36).

Regarding claims 56 and 96, Ahmed discloses a network-computing environment and a method (see claims 29 and 82 rejections) wherein the policy management system acquires other locale base information and services for policy management (i.e., in-call mobility management) (see col. 18, line 64 through col. 19, line 5).

Regarding claim 58, Ahmed discloses a network-computing environment (see claim 29 rejection) wherein the policy management system acquires other locale base information and services for asset tracking (see col. 3, lines 52 through col. 4, line 3).

Regarding claims 69 and 99, Ahmed discloses a network-computing environment (see claims 29 and 82 rejections) wherein the policy management system applies a rule based on at least one of a user, a user group, a device group, a process, an application identity, a network point of attachment (see col. 7, lines 11-19).

Regarding claims 72 and 102, Ahmed discloses a network-computing environment (see claims 29 and 82 rejections) wherein the policy management system performs policy

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management processing and/or decision to accommodate bandwidth limitations of the current network or subnetwork the mobile computing device has access to (i.e., the MAC layer allows reserved channels for those connections that need a guaranteed bandwidth and frees up the remaining bandwidth for shared contention based access making for an overall efficient operation) (see col. 8, lines 43-46; also refer to the description of fig. 3A).

Regarding claims 73 and 103, Ahmed discloses a network-computing environment (see claims 29 and 82 rejections) wherein the policy management system performs policy management processing and/or decision making to accommodate security considerations of the mobile computing device (see col. 4, lines 4-29).

Regarding claim 77, Ahmed discloses a network-computing environment (see claim 29 rejection) wherein the policy management system updates policy anytime before establishing a connection (see col. 15, lines 2-5).

Regarding claim 78, Ahmed discloses a network-computing environment (see claim 29 rejection) wherein the policy management system updates policy anytime while establishing a connection (i.e., mobile locations are updated during a call) (see col. 19, lines 15-16).

Regarding claim 79, Ahmed discloses a network-computing environment (see claim 29 rejection) wherein the policy management updates policy anytime after establishing a connection (i.e., mobile locations are updated during a call (i.e., after establishing connection)) (see col. 19, lines 15-16).

Regarding claims 80 and 104, Ahmed discloses a network-computing environment (see claims 29 and 82 rejections) wherein the policy management system dynamically manages and/or controls at least one of access to and consumption of the resource even while the mobile

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computing device is unreachable (i.e., during a connection/call, temporary addresses (resources) are used to route optimization as mobiles move or roam) (see fig. 3B, col. 11, lines 42-46).

Regarding claims 81 and 105, Ahmed discloses a network-computing environment (see claims 29 and 105 rejections) wherein the policy management system dynamically manages and/or controls at least one of access to and consumption of the resource event while the mobile computing device is unable to send IP datagrams over any network or subnetwork (i.e., during a connection/call, temporary addresses (resources) are used to route optimization as mobiles move or roam) (see fig. 3B, col. 11, lines 42-46).

Regarding claim 82, Ahmed discloses in a wireless environment (see fig. 1) comprising roaming at least one mobile computing device within a network environment (see fig. 1, col. 7, lines 6-8) comprising a plurality of networks or subnetworks (see fig. 1, col. 6, lines 61-65), and executing, on said at least one mobile computing device, at least one software component that at least one of accesses and consumes at least one computing resource via at least one of said plurality of networks or subnetworks (i.e., network nodes provide network access to mobile stations, and in case of connection-oriented applications, the connections are identified in the access segments where there are resources dedicated on a per connection basis. Thus, at each connection, an application (i.e., software component) consumes dedicated resources) (see fig. 3A, col. 7, line 59 through col. 8, line 5), a policy management method comprising at least in part through cooperation involving said mobile computing device, dynamically managing access by said mobile computing device to said resource, as said mobile computing device roams, even if communications to the resource is secure (i.e., during a connection/call (secure connection),

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temporary addresses (resources) are used to route optimization as mobiles move or roam) (see fig. 3B, col. 11, lines 42-46).

Claim Rejections - 35 USC § 103

9. Claims 1-17, 20, 24, 27-28, 31, 66-68, 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed et al. (Ahmed), U.S. Patent No. 6256300 in view of McCloghrie et al. (McCloghrie), U.S. Patent No. 6286052.

10. Regarding claim 1, Ahmed discloses in a mobile computing network or subnetwork including at least one mobile computing device coupled to the network or subnetwork (see fig. 1), the mobile computing device communicating with a least another computing device via the network or subnetwork (see fig. 1), a policy-management arrangement comprising: at least one computing device (i.e., mobility management module) (see fig. 3B) that performs policy management that manages access to a computer resource by at least one application, the computing resource available at least in part through the network or subnetwork (i.e., during a connection/call (secure connection), temporary addresses (resources) are used to route optimization as mobiles move or roam (see fig. 3B, col. 11, lines 42-46).

Although Ahmed discloses mobility management for a mobile computing network, Ahmed does not specifically disclose a policy-management arrangement wherein the policy management arrangement provides at least one of a rule and a control that dynamically determines selectable levels of service based at least in part on a device's ability to communicate via the network or subnetwork.

However, McCloghrie discloses a policy-management arrangement (see abstract) comprising at least one computing device that performs policy management (i.e. policy server 216) (see fig. 2, col. 6, lines 5-10) that manages at least one of consumption of an access to a computer resource by at least one application, the computing resource available at least in part through the network or subnetwork (see fig. 3, col. 6, line 67 through col. 7, line 20), wherein the policy management arrangement provides at least one of a rule and a control that dynamically determines selectable levels of service based at least in part on a device's ability to communicate via the network or subnetwork (see fig. 5B, col. 15, line 60 through col. 16, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ahmed with teachings of McCloghrie to obtain a policy management arrangement as described by the claimed invention. A motivation for doing so would have been to ensure the proper management of resources within the network.

Regarding claim 2, Ahmed discloses a policy management arrangement as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement as described, Ahmed does not specifically disclose a policy management arrangement that distributes processing of attributes of policy management rules to the at least one computing device.

However, McCloghrie discloses a policy-management arrangement (see abstract) that distributes processing of attributes of policy management rules to the at least one computing device (i.e., the policy server may transmit one or more decision messages to network devices) (see col. 17, lines 50-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as taught by McCloghrie to the teachings as taught by Ahmed in order to obtain a policy management arrangement with the characteristics as specified. A motivation for doing so would have been to ensure that the device has specific knowledge of the specified rules so that traffic flows could be managed and identified properly.

Regarding claim 3, Ahmed discloses a policy management arrangement as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement as described, Ahmed does not specifically disclose a policy management arrangement further comprising a priority arrangement that prioritizes policy management rules by position in a policy table and/or explicit notation by an ordinal ensuring the expected behavior.

However, McCloghrie discloses a policy-management arrangement further comprising a priority arrangement that prioritizes policy management rules by position in a policy table (i.e., a PID specifies a particular policy class or policy instance in a hierarchical arrangement) (see col. 14, lines 36-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by McCloghrie with the teachings as disclosed by Ahmed to obtain a policy management arrangement with the stated characteristics. A motivation for doing so would have been to expedite real time critical decisions.

Regarding claim 4, Ahmed discloses a policy management arrangement as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement as described, Ahmed does not specifically disclose a policy management arrangement further comprising a data store for the rule attributes that is locally or centrally administered via central management services.

However, McCloghrie discloses a policy-management arrangement further comprising a data store for the rule attributes that are locally or centrally administered via central management services (i.e., the policy server maintains or otherwise has access to a store of network policies established by the network administrator) (see col. 5, lines 17-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by McCloghrie with the teachings as disclosed by Ahmed to obtain a policy management arrangement with the stated characteristics. A motivation for doing so would have been to ensure that the policies are distributed properly.

Regarding claims 5, 27-28, Ahmed discloses a policy management arrangement wherein as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement wherein a home agent authenticates a mobile node, and redirects data packets to the mobile's location (see col. 2, lines 55-57) and that if the mobile's point of attachment changes, then the mobile's HLR needs to be updated (see col. 13, lines 31-33), Ahmed does not specifically disclose a policy management arrangement further comprising an arrangement that modifies behavior of a particular application based on a number of parameters, which includes network point of attachment, and trust relationship (authentication).

However, McCloghrie discloses a policy-management arrangement further comprising an arrangement that modifies behavior of a particular application based on a number of parameters

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(i.e., the policy decision update message is received at the local policy enforcer, which modifies the corresponding traffic flow state with the updated policies) (see col. 18, lines 65-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by McCloghrie with the teachings as disclosed by Ahmed to obtain a policy management arrangement with the stated characteristics. A motivation for doing so would have been to ensure the proper management of traffic flow.

Regarding claim 6, Ahmed discloses a policy management arrangement as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement as described, Ahmed does not specifically disclose a policy management arrangement wherein the effect of the policy management is to dynamically allow, deny, or delay requests based on attributes of policy management rules.

However, McCloghrie discloses a policy-management arrangement wherein the local policy enforcer requests and receives from the policy server corresponding policy or service treatments for the anticipated traffic flows (see col. 7, lines 43-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as disclosed by McCloghrie with the teachings as described by Ahmed to obtain the characteristics of the claimed invention. A motivation for doing so would have been to ensure the proper management of traffic flow.

Regarding claim 7, Ahmed discloses a policy management arrangement as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement as described, Ahmed does not specifically disclose a policy management arrangement further comprising an arrangement that invokes a rule or set of rules to control or modify an application processes even after the application is already started.

However, McCloghrie discloses a policy-management arrangement further comprising an arrangement that invokes a rule or set of rules to control or modify an application processes even after the application is already started (see col. 18, line 65 through col. 19, line 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by McCloghrie with the teachings as disclosed by Ahmed to obtain a policy management arrangement with the stated characteristics. A motivation for doing so would have been to ensure the proper management of traffic flow.

Regarding claim 8, Ahmed discloses a policy management arrangement (see claim 1 rejection) further comprising point of presence location information that is further used to govern applications at least one of consumption of and access to the computer resource and provide relevant information to the mobile computing device (i.e., the SNLA itself indicates the relative location of a mobile. Therefore, if a mobile moves during a call, it automatically changes the source address to the new SNLA in its packets. Since the correspondent mobile can recognize the mobile from the mobile ID portion of the SNLA, it knows that the mobile has changed its location. Therefore, the correspondent mobile stamps the destination field of its packets with the new SNLA. Without extra signaling messages, mobile locations are updated during a call) (see col. 19, lines 8-16).

Regarding claim 9, Ahmed discloses a policy management arrangement further comprising an arrangement that uses rate of motion (i.e., delay) (see col. 14, lines 15-17) along with distance measurements (see col. 5, lines 33-37) to govern application(s) access to the computer resource and/or the communication path (see col. 14, lines 15-36).

Regarding claim 10, Ahmed discloses a policy management arrangement (see claim 8 rejection) further comprising an arrangement that extracts topological information as result of the location information (i.e., the nodes are equipped with a topology sensing scheme which enables them to sense the presence of other nodes as they move closer. The nodes use certain rules to select which of their neighboring nodes they should have links with. The idea is to enable nodes to establish links with their nearest neighbors subject to certain connectivity requirements) (see col. 7, lines 12-19).

Regarding claim 11, Ahmed discloses a policy management arrangement (see claim 1 rejection) that performs per-user mobile policy management for managing consumption of at least one network resource (i.e., resource consumption is dedicated on a per connection basis) (see fig. 3A, col. 7, line 59, through col. 8, line 5).

Regarding claims 12, Ahmed discloses a policy management arrangement as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement as disclosed, Ahmed does not specifically disclose a policy management arrangement further including a component allowing a system administrator to centrally manage or control the at least one of consumption of and access to network resources by application(s) executing on at least one of the mobile computing device and the at least another computing device.

However, McCloghrie discloses a policy-management arrangement further including a component allowing a system administrator to centrally manage or control the at least one of consumption of and access to network resources by application(s) executing on a computing device (see col. 17, lines 27-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by McCloghrie with the teachings as disclosed by Ahmed to obtain a policy management arrangement with the stated characteristics. A motivation for doing so would have been to ensure the proper management of traffic flow.

Regarding claims 13, Ahmed discloses a policy management arrangement as described above (see claim 12 rejection).

Although Ahmed discloses a policy management arrangement as disclosed, Ahmed does not specifically disclose a policy management arrangement further including a component that allows a system administrator to place policy management controls on a computing.

However, McCloghrie discloses a policy management arrangement further including a component that allows a system administrator to place policy management controls on a computing (see col. 17, lines 27-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by McCloghrie with the teachings as disclosed by Ahmed to obtain a policy management arrangement with the stated characteristics. A motivation for doing so would have been to ensure the proper management of traffic flow.

Regarding claim 14, Ahmed discloses a policy management arrangement (see claim 1 rejection) wherein the policy management arrangement manages consumption of network bandwidth (see fig. 3A, col. 7, lines 59-67; and col. 8, lines 43-46).

Regarding claim 15, Ahmed discloses a policy management arrangement (see claim 1 rejection) wherein the policy management arrangement manages consumption of network resources (i.e., resource consumption is dedicated on a per connection basis) (see fig. 3A, col. 7, line 59, through col. 8, line 5).

Regarding claim 16, Ahmed discloses a policy management arrangement (see claim 1 rejection) wherein the policy management arrangement provides security related controls (i.e., the network administrator uniquely assigned identifier to the network nodes) (see col. 4, lines 11-14).

Regarding claim 17, Ahmed discloses a policy management arrangement as described above (see claim 1 rejection).

Although Ahmed discloses a policy management arrangement as described, Ahmed does not specifically disclose a policy management arrangement wherein the policy management arrangement provides centralized administration of policy to be enforced.

However, McCloghrie discloses a policy management arrangement wherein the policy management arrangement provides centralized administration of policy to be enforced (see col. 5, lines 17-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by McCloghrie with the teachings as disclosed

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by Ahmed to obtain a policy management arrangement with the stated characteristics. A motivation for doing so would have been to ensure the proper management of traffic flow.

Regarding claim 20, Ahmed discloses a policy management arrangement as (see claim 1 rejection) wherein the at least another computing device controls and limits access to a computing resource on a per-user basis as well as on a per-device basis (i.e., resources are dedicated on a per-connection basis) (see col. 7, line 62, through col. 8, line 5).

Regarding claim 24, Ahmed discloses a policy management arrangement as (see claim 1 rejection) wherein the at least one mobile device or the at least another computing device compresses application data based at least in part on rule or control (i.e., compression module) (see col. 11, lines 9-12).

Regarding claims 31 and 84, Ahmed discloses a network-computing network computing environment and a method as described (seen claims 29 and 84 rejections).

Although Ahmed discloses a computing environment as described, Ahmed does not specifically disclose a network-computing environment and a method wherein dynamically managing includes dynamically controlling.

However, McCloghrie discloses a policy-management arrangement and a method (see abstract) wherein dynamically managing includes dynamically controlling comprising at least one computing device that performs policy management (see fig. 3, col. 6, line 67 through col. 7, line 20, and col. 15, line 60 through col. 16, line 12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ahmed with teachings of McCloghrie to obtain a policy

management arrangement as described by the claimed invention. A motivation for doing so would have been to ensure the proper management of resources within the network.

Regarding claims 66-68, Ahmed discloses a network-computing network computing environment as described (seen claim 29 rejection).

Although Ahmed discloses a computing environment as described, Ahmed does not specifically disclose an environment wherein the policy management rule comprises a rules engine that applies at least one rule, wherein the rule may be a learned rule or a statically defined rule.

However, McCloghrie discloses an environment wherein the policy management rule comprises a rules engine that applies at least one rule (see col. 15, lines 59 through col. 16, line 10), wherein the rule may be a learned rule (dynamic) (see col. 11, lines 25-32) or may be statically defined (i.e., preconfigured) (see col. 11, lines 25-32).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ahmed with teachings of McCloghrie to obtain a policy management arrangement as described by the claimed invention. A motivation for doing so would have been to ensure the proper management of resources within the network.

11. Claims 44, 57, 65, and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of St-Pierre et al. (St-Pierre), U.S. Patent No. 5901352.

Regarding claim 44, Ahmed discloses a network-computing environment as described above (see claim 39 rejection).

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Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose a network-computing environment wherein the locale comprises a GPS coordinates.

However, St-Pierre discloses a system wherein location information comprises GPS coordinates (see col. 8, lines 40-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been to ensure the accuracy of the obtained information.

Regarding claim 57, Ahmed discloses a network-computing environment as described above (see claims 29 and 56 rejections).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose a network-computing environment wherein the policy management system acquires other locale base information and services for network modeling.

However, St-Pierre discloses a system wherein the policy management system acquires other locale base information and services for network modeling (see col. 4, line 56 through col. 5, line 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been to provide a record having comprising of multiple records forming a lattice structure.

Regarding claims 65 and 98, Ahmed discloses a network-computing environment as described above (see claims 29 and 82 rejections).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose a network-computing environment wherein the environment provides seamless connectivity for the mobile computing device while switching networks mediums or point of attachments.

However, St-Pierre discloses a system that provides seamless service control and intelligent routing between different networks (see col. 7, lines 7-13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been to provide a transparent inter-networking between different networks (see col. 7, lines 13-14).

12. Claims 45 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of Goertzel et al. (Goertzel), U.S. patent No. 6308273.

Ahmed discloses a network-computing environment and a method as described above (see claims 29 and 82 rejections).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose a network-computing environment wherein the policy management system and said mobile computing device cooperate to allow certain operations in one area of an enterprise but not in another area of said enterprise.

However, Goertzel discloses a system wherein access to network resources is based on information that includes the location of the connecting user (see col. 1, lines 55-60). Thus one skilled in the art would unhesitatingly conceptualize that depending on the location of users

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within an area of an enterprise (for e.g., an office) and outside of an enterprise (for e.g., another office, parking lot, or a remote location), access to a network may be restricted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have to ensure that only required personnel might have access to the network that would enhance the system's security.

13. Claims 18-19, 32, and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed and McCloghrie, in further view of Pirot e al. (Pirot), U.S. Patent No. 6856676.

Regarding claims 18, 32, and 85 Ahmed and McCloghrie disclose an arrangement as described above (see claims 1, 29, and 82 rejections).

Although the combination discloses an arrangement as described, the combination does not specifically disclose an arrangement wherein the at least another computing device comprises a proxy server or acts as a proxy for said mobile computing device.

However, Pirot discloses an arrangement wherein the service management subsystem can function as a proxy server whereby the service management subsystem forwards the service management request from the network towards servers (see col. 8, lines 41-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Pirot with the teachings as described by Ahmed and McCloghrie to arrive at the claimed invention. A motivation for doing so would have been to facilitate activities in the egress direction.

Regarding claim 19, Ahmed and McCloghrie disclose an arrangement as described above (see claim 1 rejection).

Although the combination discloses an arrangement as described, the combination does not specifically disclose an arrangement wherein the at least another computing device proxies distinct data streams for mobile computing devices and thereby provides a central point from which to conduct policy management.

However, Pirot discloses an arrangement wherein the service management subsystem can function as a proxy server whereby the service management subsystem forwards the service management request from the network towards servers (i.e., central point from which to conduct policy management) (see col. 8, lines 41-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Pirot with the teachings as described by Ahmed and McCloghrie to arrive at the claimed invention. A motivation for doing so would have been to facilitate activities in the egress direction.

14. Claims 21-23, 25-26, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed and McCloghrie, in further view of Bowman-Amuah, U.S. Patent No. 6438594.

Regarding claim 21, the combination discloses an arrangement as described above (see claim 1 rejection).

Although the combination discloses an arrangement as described, the combination does not specifically disclose an arrangement wherein the policy management locks out certain users from accessing at least one computing resource.

However, Bowman-Amuah discloses a policy management arrangement comprising an authorization service, which determines if the user has the appropriate permissions to either allow or disallow access to resources. Also, authorization can occur locally on a server to limit access to specific system resources or files (see col. 85, lines 1-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Bowman-Amuah with the teachings as described by Ahmed and McCloghrie to arrive at the claimed invention. A motivation for doing so would have been to enhance the authorization procedure.

Regarding claim 22, the combination discloses an arrangement as described above (see claim 1 rejection).

Although the combination discloses an arrangement as described, the combination does not specifically disclose an arrangement wherein the policy management arrangement interacts with users and controls particular web URL's the users can visit.

However, Bowman-Amuah discloses a policy management, which interacts with users (i.e., application proxies) (see col. 85, lines 22-33) and controls particular web URL's the users can visit (World Wide Web filters) (see col. 85, lines 18-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Bowman-Amuah with the teachings as

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described by Ahmed and McCloghrie to arrive at the claimed invention. A motivation for doing so would have been to enhance the authorization process.

Regarding claim 23, the combination discloses an arrangement as described above (see claim 1 rejection).

Although the combination discloses an arrangement as described, the combination does not specifically disclose an arrangement wherein the policy management filters data associated with an application service request.

However, Bowman-Amuah discloses a policy management, which interacts filters data associated with an application service request (i.e., transport-layer filtering) (see col. 91, lines 39-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Bowman-Amuah with the teachings as described by Ahmed and McCloghrie to arrive at the claimed invention. A motivation for doing so would have been to enhance the authorization process.

Regarding claims 25-26, and 36, the combination discloses an arrangement as described above (see claims 1 and 29 rejections).

Although the combination discloses an arrangement as described, the combination does not specifically disclose an arrangement wherein the policy management enhances an application level service in a seamless or transparent manner.

However, Bowman-Amuah discloses a policy management wherein the policy management enhances an application level service in a seamless (see col. 207, lines 48-50) and transparent manner (see col. 120, lines 61-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Bowman-Amuah with the teachings as described by Ahmed and McCloghrie to arrive at the claimed invention. A motivation for doing so would have to ensure the proper execution of the policy procedure.

15. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed and Roach et al. (Roach) (U.S. Patent No. 5310997) in view of Goertzel.

Ahmed discloses a network-computing environment as described above (see claim 29 rejection).

Although Ahmed discloses an environment as described, Ahmed does not specifically disclose an environment comprising an enterprise having a loading dock and an office area.

However, Roach discloses an enterprise comprising a loading dock and an office area (see fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Ahmed with the teachings of Roach to arrive at an environment that comprises a loading dock area and an office area served by a wireless network. A motivation for doing so would have to ensure the proper functioning of the enterprise as related to security within the environment.

Although the combination discloses an environment as described, Ahmed and Roach do not specifically disclose an environment wherein the policy management system cooperating with the mobile computing device does not permit the mobile computing device to access the office environment via the wireless network.

However, Goertzel discloses a system wherein access to network resources is based on information that includes the location of the connecting user (see col. 1, lines 55-60). Thus one skilled in the art would unhesitatingly conceptualize that depending on the location of users within an area of an enterprise (for e.g., an office) and outside of an enterprise (for e.g., another office, parking lot, or a remote location), access to a network may be restricted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have to ensure that only required personnel might have access to the network that would enhance the system's security.

16. Claims 50, 55, and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of Wiegel, U.S. Patent No. 6484261.

Regarding claim 50, Ahmed discloses a network-computing environment as described above (see claim 29 rejection).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose an environment wherein the policy management system allows for other actions to be invoked based on rule evaluation.

However, Wiegel discloses an environment wherein the policy management system allows for other actions to be invoked based on rule evaluation (see col. 9, lines 18-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Ahmed with the teachings as described by Wiegel to arrive at the claimed invention. A motivation for doing so would have been to enhance

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the policy function by providing an environment where only actions related to the proper rule or policy would be called forth.

Regarding claims 55 and 95, Ahmed discloses a network-computing environment and a method as described above (see claims 29 and 82 rejections).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose an environment wherein the policy management system allows an operator to override existing rules.

However, Wiegel discloses an environment wherein the policy management system allows an operator to override existing rules (see col. 7, lines 61-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Ahmed with the teachings as described by Wiegel to arrive at the claimed invention. A motivation for doing so would have been to ensure that only proper rules are being called forth.

17. Claims 51-54, and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of Bowman-Amuah.

Regarding claim 51, Ahmed discloses a network-computing environment as described above (see claim 29 rejection).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose an environment wherein the policy management system logs events.

However, Bowman-Amuah discloses an environment wherein the policy management system logs events (i.e., logging services) (see col. 106, lines 5-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Ahmed with the teachings as described by Bowman-Amuah to arrive at the claimed invention. A motivation for doing so would have been to keep updated records of user activities (see col. 106, lines 5-10).

Regarding claim 52, Ahmed discloses a network-computing environment as described above (see claim 29 rejection).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose an environment wherein the policy management system sends alerts.

However, Bowman-Amuah discloses an environment wherein the policy management system sends alert (i.e., warning messages) (see col. 106, lines 5-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Ahmed with the teachings as described by Bowman-Amuah to arrive at the claimed invention. A motivation for doing so would have been to ensure the proper functioning of the system.

Regarding claims 53 and 94, Ahmed discloses a network-computing environment and a method as described above (see claims 29 and 82 rejections).

Although Ahmed discloses a network-computing environment and a method as described, Ahmed does not specifically disclose an environment and a method wherein the policy management system notifies users that an action is being denied, delayed, or conditioned.

However, Bowman-Amuah discloses an environment and a method wherein the policy management system notifies users that an action is being denied, delayed, or conditioned (see col. 307, lines 30-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Ahmed with the teachings as described by I Bowman-Amuah to arrive at the claimed invention. A motivation for doing so would have been to ensure the proper functioning of the system.

Regarding claim 54, Ahmed discloses a network-computing environment as described above (see claim 29 rejection).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose an environment wherein the policy management system notifies users that an action is being denied, delayed, or conditioned.

However, Bowman-Amuah discloses an environment wherein the policy management system interactively notifies users (see col. 307, lines 30-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Ahmed with the teachings as described by I Bowman-Amuah to arrive at the claimed invention. A motivation for doing so would have been to ensure the proper functioning of the system.

18. Claims 59-64, 97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of Stewart et al. (Stewart), U.S. patent No. 6308273.

Regarding claim 59, Ahmed discloses a network-computing environment as described above (see claims 29 and 82 rejections).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose a network-computing environment wherein the policy management

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system automatically presents information applicable within context of a mobile computing device present location.

However, Stewart discloses network-computing environment comprising automatically presenting information applicable within context of a mobile computing device present location (see col. 26, lines 13-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ahmed with the teachings as described by Stewart to arrive at the claimed invention. A motivation for doing so would have been to provide to the users updated information about a specific location area.

Regarding claim 60-64, Ahmed discloses a network-computing environment as described above (see claim 59 rejection).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose an environment wherein the information comprises a message, a file, an electronic format, current sales, discount and services, and electronic coupon used for sales promotion.

However, Stewart discloses a network-computing environment wherein the information comprises a message, a file, an electronic format, current sales, discount and services, and electronic coupon used for sales promotion (see fig. 11, col. 25, lines 37-45, and col. 26, lines 26 through col. 27, line 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Ahmed with the teachings as described by Stewart to

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arrive at the claimed invention. A motivation for doing so would have been to provide to the users updated information about a specific location area.

19. Claims 70 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of Ball et al. (Ball), U.S. Patent No. 64462000.

Ahmed discloses a network-computing environment as described above (see claims 29 and 82 rejections).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose a network-computing environment wherein the policy management system uses a distributed architecture to apply or share the same decision set.

However, Ball discloses a service management system wherein the policy management system uses a distributed architecture to apply or share the same decision set (see fig. 2, col. 4, lines 9-25, and lines 51-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been to provide a system, which supports several different models (see col. 4, lines 38-50)

20. Claims 71 and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of Kovacs, U.S. Patent No. 6263213.

Ahmed discloses a network-computing environment as described above (see claims 29 and 82 rejections).

Although Ahmed discloses a network-computing environment as described, Ahmed does not specifically disclose an environment wherein the policy management system performs policy management processing and/or decision to accommodate limited processing power of the mobile computing device.

However, Kovacs discloses an environment wherein in order to adapt the mobile device dynamically (online) to the changing environment, e.g. low battery power, fading signal strength of the wireless communication or else, a control component of the control application is able to interrupt and halt executing components, to delete existing components or to create new components. Upon receiving the control signals exchanged, the components will shut down, halt or start the associated electronic elements of the mobile device (see col. 3, line 65 through col. 4, line 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been to ensure the proper management of resources as related to power management.

21. Claim 74-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahmed in view of Inoue et al. (Inoue), U.S. Patent No. 6501767.

Ahmed discloses a network-computing environment as described above (see claim 29 rejection).

Although Ahmed discloses an environment as described, Ahmed does not specifically disclose an environment wherein the policy management system defines and populates a policy

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table, and wherein the policy management system statically and dynamically populates the policy table.

However, Inoue discloses an environment wherein the policy management system defines and populates a policy table, and wherein the policy management system statically and dynamically populates the policy table (i.e., more specifically, when a packet originating from a global address is received at the data input/output unit 44, the home address key information and the current address information contained in the header are referred, and whether an entry corresponding to them exists or not in the current location address-home address-key information mapping table 42 is checked. If not, a new entry corresponding to them is entered. Then, the packet is decrypted at the decryption unit 45 by using this home address key. Then, the content is checked and the home address information is obtained, and this information is entered into the private address-global address-mapping table 41) (see col. 11, lines 30-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing so would have been to guarantee the proper functioning of the management system.


Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Louis Desir whose telephone number is 703-605-4312. The examiner can normally be reached on (571) 272-7799.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pierre-Louis Desir
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09/29/2005

JEAN GELIN
PRIMARY EXAMINER

